Filing Date: Herewith

Title: PRESBYOPIC BRANCH TARGET PREFETCH METHOD AND APPARATUS

Assignee: Intel Corporation

IN THE SPECIFICATION

Page 2

Dkt: 884.219US2 (INTEL)

Please amend the specification as follows:

Please add the following paragraph at page 1, after the title, as follows:

This application is a continuation of U.S. Patent Application Serial No. 09/518,939, filed on March 6, 2000, which is incorporated herein by reference.

Please amend the paragraph that begins at page 5, line 27 as follows:

Blocks 320, 330, 340, and 350 form a "hammock." A hammock occurs when the control flow can branch to different subsequent blocks, and the different subsequent blocks return control to a common subsequent block. For example, in control flow graph 300, block 320 can branch to either block 330 or block 340. In other words, the "e.out c.out" instruction at exit IP 326 can have a target address that resolves to either entrance IP 332 or entrance IP 342. When the target address resolves to entrance IP 332, control flow branches to block 330, and instructions beginning with "d.in" are executed. In contrast, when the target address resolves to entrance IP 342, control flow branches to block 340, and instructions beginning with "e.in" are executed.

Please amend paragraph that begins at page 7, line 4 as follows:

BTB 205 also includes CC Field 420. In some embodiments, CC Field 420 includes a saturating counter that counts the number of times the cached branch is taken. For example, in embodiment 400, CC Field 420 includes a 3 bit saturating counter. Each time the cached branch is taken, the saturating counter in CC Field 420 is incremented. When the counter reaches the maximum value, the counter remains at the maximum value and no longer increments. Each time the branch is not taken, the saturating counter decrements. If a saturating counter drops below zero, then the confidence in the cached branched is eroded to the point that the

PRELIMINARY AMENDMENT

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corresponding record is removed from BTB 205. In some embodiments, CC field 420 is kept small, in part because BTB 205 can be on a critical path for instruction fetches. In embodiment 400, CC field 420 is shown as three bits wide. In this embodiment, eight consecutive non-taken branches will cause [[an]] a record be removed from BTB 205.

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